

MADERA COUNTY

SPECIAL DISTRICTS ELECTRICIAN

DEFINITION

Under direction, to perform skilled preventive maintenance, repairs, and installation of electrical circuits, motors, controls, switching, and other equipment on water and sewer treatment systems; to perform general skilled and semi-skilled maintenance assignments; and to do related work as required.

SUPERVISION EXERCISED

Exercises no supervision.

EXAMPLES OF IMPORTANT AND ESSENTIAL DUTIES

Installs, repairs, and maintains electrical circuits, relays, switching, wiring, and electronic equipment necessary to operate and monitor water and sewer treatment facilities; troubleshoots and performs maintenance and repairs on computer monitored systems including solid state and digital readout equipment; calibrates instrumentation; performs system tests and fault diagnostics as required to identify and correct system failures; installs conduit and pulls wires for motors, control panels, lighting fixtures, and controls; performs phase balancing operations and makes load computations on a variety of electrical circuits; reads blueprints and schematics; performs general maintenance work which includes tractor operations, cement work, replacing water and sewer lines, and maintaining effluent spray fields; maintains records and prepares reports; order replacement parts and new equipment and maintain inventories.

OTHER JOB RELATED DUTIES

Performs related duties and responsibilities as assigned.

JOB RELATED AND ESSENTIAL QUALIFICATIONS

Knowledge of:

Principles and practices of electrical applications and operations as they relate to controls and operation of pump motors and general electrical work.

Appropriate electrical codes.

Tools, methods, materials, and equipment used in the maintenance and repair of water treatment plants, sewer lines, water lines, sewer treatment plants, and pumps.

Occupational hazards and standard safety practices necessary in the area of work assigned.

Skill to:

Skillfully operate a variety of hand and power tools and equipment.

Operate electrical testing equipment.

Perform heavy physical labor.

Operate a motor vehicle safely.

***Madera County
Special Districts Electrician (Continued)***

Ability to:

Perform a variety of preventive maintenance and repair work on circuits, equipment, pumps, and water control equipment.
Design, construct, and maintain electrical circuits.
Perform electronic repairs on computer monitored systems.
Read and understand sketches, schematics, blueprints, diagrams, plans, and specifications.
Perform general construction and maintenance work.
Estimate necessary supply and material needs.
Perform inspections, identifying maintenance and repair needs.
Prepare clear and concise reports.
Communicate clearly and concisely, both orally and in writing.
Establish, maintain, and foster positive and harmonious working relationships with those contacted in the course of work.

Experience and Training Guidelines:

Any combination equivalent to experience and training that would provide the required knowledge, skills, and abilities would be qualifying. A typical way to obtain the knowledge, skills, and abilities would be:

Experience:

Three years of increasingly responsible skilled work experience in the maintenance, repair, and installation of electrical systems.

Training:

Equivalent to the completion of the twelfth grade supplemented by specialized training in the maintenance, repair, and installation of electrical systems.

License or Certificate:

Possession of, or ability to obtain, an appropriate, valid driver's license.

Special Requirements:

Essential duties require the following physical skills and work environment:

Ability to stand, walk, kneel, crouch, stoop, squat, twist, climb, and lift 75 lbs.; exposure to cold, heat, noise, outdoors, vibration, confining work space, chemicals, infectious materials, mechanical hazards, and electrical hazards; ability to travel to different sites and locations; availability for shift work, on-call, and stand-by.

Effective Date: May, 1995